



## RELATIONSHIP ANXIETY WITH STIGMA TO TUBERCULOSIS PATIENTS IN STUDENT AT ONE PRIVATE UNIVERSITY IN WESTERN INDONESIA

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### **ABSTRACT**

Tuberculosis sufferers are infected persons with the infectious disease caused by mycobacterium tuberculosis. Tuberculosis transmission through air and droplets, like coughing or sneezing from patients, caused stigma in the social community with discrimination is fear, worry, anxiety adjacent, and no interaction with tuberculosis patients diagnosed. Stigma in tuberculosis patients can drop the bounce of an individual right in a social aspect. Aim study was to evidence the relationship between anxiety and stigma among tuberculosis patients in students at one private university in western Indonesia. This study was descriptive correlational research, consisting of a student of the active year 2018 as respondents, using a cross-sectional approach. Analysis data was univariate, and bivariate to assess the relationship between anxiety with stigma by the Somers d test. The result study was univariate, showed the relationship between anxiety and stigma level to tuberculosis in the lower category, were 94 respondents by percentage 52% of the 179 respondents, and a bivariate showed a significant relationship between anxiety with stigma to tuberculosis patients,  $p=0.025$  of the confidence  $p<0.05$ . Relationship anxiety with stigma to tuberculosis patients in respondents is significantly low, because they have precepts and the better knowledge from learning education at one private university in western Indonesia.

Keywords: anxiety; stigma; student; tuberculosis

### **INTRODUCTION**

Tuberculosis (TB) is one of the diseases that included the category of infectious diseases. The cause of tuberculosis is Mycobacterium tuberculosis bacteria. These bacteria can attack various organs in the body, especially the lungs. Tuberculosis diseases that are not handled properly until achieving recovery can lead to complications of disease at risk of death (Kementerian Kesehatan Republik Indonesia, 2015). Tuberculosis was the cause of death from the 13 cases and the second deadly infectious disease after Covid-19 (World Health Organization, 2021). TB is spread by coughing or sneezing which is the main trigger for poor health, because it works as an infectious agent.

Research report data in 2020 showed that there were 86 TB cases in 30 countries with the highest increase, of which there are 8 countries recorded TB, about 2/3 cases are India, China, Indonesia, Philippines, Pakistan, Nigeria, Bangladesh and South Africa (World Health Organization, 2021). Tuberculosis cases in DKI Jakarta Province in 2018 were reported as 32,570 cases or 0.3% of the entire population of the capital city of DKI Jakarta and continued to experience an average increase of 3,145 people per year (Nuraini Avionita dan Pratiwi Hani, 2019). Therefore, tuberculosis is one of the diseases in the midst of a social community, which can cause a negative stigma that affects social aspects. Anxiety with stigma in tuberculosis patients is influential in social aspects, because it is based on the development and transmission of tuberculosis through media sharing.

Tuberculosis transmission can be by air and droplet and droplet which causes the stigma of fear, creating a stigma of fear, when interacting with patients diagnosed with pulmonary TB. Anxiety

with a bad stigma issue to discrimination from the community, so that it can crush mentally and make sufferers isolated from the community. Stigma is a negative perception and reasoning related to illness, mental, parenting, social status, and violation of cultural norms conceptualized and internalized individually (Reupert et al., 2020). Stigma in the order of all aspects of social life in society can be found from all ages degrading, discriminating, and discrediting individual rights as human beings with dignity. (Farida, 2019).

Factors that influence the stigma of tuberculosis sufferers, namely concerns about infection, lack of knowledge, delayed care, and community factors, such as economic level, prison inmates, sex workers, minority groups and people infected with HIV/AIDS (Suandi et al., 2012). Stigma in mental health is internalized by every individual socially in terms of health performance (Ahmedani, 2011). The stigma received by tuberculosis sufferers from low knowledge of the community, as well as self-concept or self-image are not able to have an impact on the destruction of self-esteem and changes in behavior occur. Social stigma that is received from the community that avoids and isolates tuberculosis patients (Sihotang et al., n.d.). Stigma can have an impact on the psychology of tuberculosis sufferers, trigger depression, the acceptance of nursing care experiences obstacles, the quality of life of tuberculosis sufferers decreases and causes feelings of shame and depression (Sari Yunita, 2018).

Nursing students are part of the social community as a category of teenagers who receive education and socialization about the disease and tuberculosis sufferers. Students are categorized as young people with an age range of 10-19 years or 10 to 24 years of being unmarried based on the world health organization and BKKBN. In addition, students become academics who have good knowledge, but still have a bad perspective or stigma on tuberculosis patients. This is adjusted with the results of research reports which show that students with an age range of 18-20 years obtained from the male dormitory of the Indonesian Adventist University have a negative stigma against tuberculosis sufferers, namely fear, discomfort, and not having close relationships with pulmonary TB sufferers (Sihotang et al., 2020).

The basic reference of this research report, obtained from interview data of nursing students at western private universities, turned out to be from 10 respondents, of which 7 respondents indicated a negative stigma against tuberculosis sufferers, namely fear, and worried about contracting tuberculosis. This background of the problem is the aim of the author's interest in researching and proving the relationship between anxiety and stigma against tuberculosis sufferers at a private university in western Indonesia.

## **METHOD**

This study uses a descriptive correlation design with a cross sectional approach. The object of this research is nursing students in 2018 at one private university in western Indonesia totaling 325 students. Purposive sampling technique was then used to determine the number of respondents through the slovin formula with a margin of error of 5%, so that from 325, 179 respondents were obtained. Collecting data from respondents using questionnaires containing 30 questions, distributed via microsoft form or google form consisting of a stigma level questionnaire referring to King's College London (Guidelines to reduce stigma) sourced from the EMIC scale questionnaire consisting of 15 choice questions with answers yes, maybe, don't know, and an anxiety questionnaire. Data analysis of the results of the questionnaire regarding stigma, each "yes" point is given 2 points, "maybe" is given 1 point, "no" is given 0 points and "don't know" is given 0 points, the higher the result value, the higher the stigma.

The anxiety questionnaire consists of 15 items with the answer choices "yes" and "no", the research team gives 1 point for each "yes" answer, and gives 0 points for the "no" answer. Anxiety questionnaires regarding tuberculosis were tested for validity and reliability on 30 student respondents from the 2018 batch at one private university in western Indonesia. Testing the validity and reliability tests to get Cronbach's alpha value of 0.845, which proves the anxiety questionnaire is valid and reliable based on the reference to the questionnaire grid as follows:

Table 1.  
Anxiety Level Questionnaire Grating

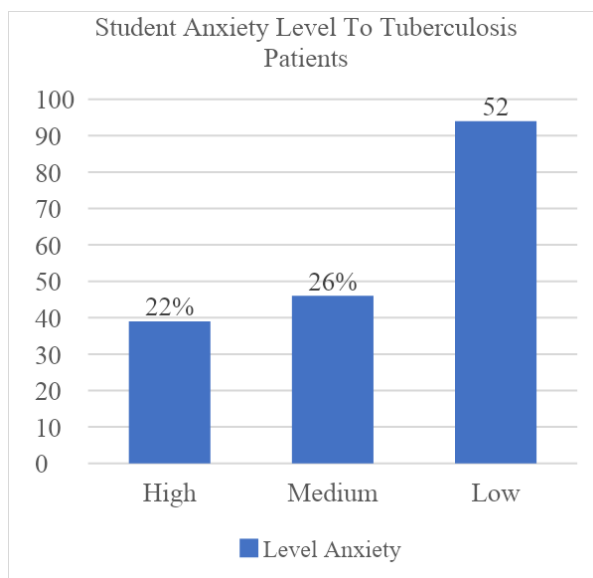
Question Indicator	Number of Questions	Answer Options
Behavior	4	Yes/No
Cognitive	6	Yes/No
Affective	5	Yes/No

Source: Annisa & Afdhal (2016)

Data analysis using univariate test to show a picture of anxiety with stigma, and the bivariate test to prove the existence of a relationship between anxiety and stigma to the tuberculosis sufferers in students at one private university in western Indonesia according to the correlation of the two variables based on the Somers D correlation test.

**RESULTS**

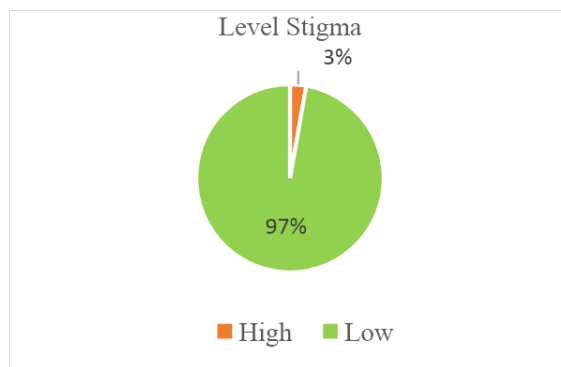
Based on the results of research through a univariate test of questionnaire data analysis, e.i. 30 questions answered by respondents from two categories of questions, 15 questions with yes and no answers, and 15 other questions, such as yes, maybe, no, don't know answers to get a picture of the level of anxiety and stigma of students towards tuberculosis sufferers, as presented in chart 2 and chart 3. Referring to data picture 2, shows that the respondent's level of anxiety to tuberculosis patients are in the low category as many as 94 respondents or equivalent to 52%. The student anxiety of the category like high 39, medium 46, low 94 was 179 respondents, where attain 100%.



Picture 1. Chart Student Anxiety Levels To Tuberculosis Patients

In contrast to the anxiety level of respondents in the high category, there were 39 or around 22%, while moderate, that is 46 respondents or with a percentage of 26%. Likewise, for

categories that show respondent stigma of respondents are in the low category totaling 174 respondents or 97% and high only 5 frequency of the respondent, average 3% (picture 2).



Picture 2. Student Anxiety Levels To Tuberculosis Patients

Based on table 2, from the data analysis according to the questionnaire obtained from the respondents and processed bivariate using somers d test, demonstrated a significant relationship between the level of anxiety and stigma. The level of significant relationship between anxiety and stigma was dominated by 174 respondents, or 97% in the low category.

Table 2  
Anxiety Level Relationship with Stigma to tuberculosis patients

		Category anxiety				ρ Value
		High	Medium	Low	Total	
Category Stigma	High	4 (2%)	1 (1%)	0 (0%)	5 (3%)	0,025
	Low	35(20%)	45(25%)	94(52%)	174(97%)	

\*Significantly  $\rho = 0,05$

**DISCUSSION**

Pulmonary tuberculosis patients by diagnosed individuals can cause a high sense of inferiority in social life. Patients with pulmonary tuberculosis are almost half identified show low self-confidence, where they feel their self-concept considered low around 61.9%, because it is influenced by less family support (Suryani et al., 2020). Other data from research reports indicate a high level of stigma, such as anxiety in the family in terms of gender, age, education, and knowledge (Aprelia et al., 2019) The incidence of increasing pulmonary TB cases triggered by low knowledge and education, causing anxiety with a negative stigma. This is in line with the statement that the higher the level of education, it will make it easier for someone to get and obtain information to prevent the transmission of tuberculosis and be more concerned about the level of health (Muhammad, 2019).

The relationship between anxiety and the stigma of tuberculosis in students at one private university in western Indonesia was relatively low. This means that nursing students at one private university in western Indonesia have a good stigma to the tuberculosis patients. Public knowledge related to tuberculosis sufferers shows a high negative stigma, so there is no interaction, discrimination and rejection occurs (Farida Nur, 2019). Students belong to community groups that have a much better understanding and knowledge than the general public to be able to have an attitude of acceptance and an approach to reducing the circulating stigma.

Knowledge with student stigma that is much better in acceptance of tuberculosis patients, shows low stigma (Simbolon et al., 2020). The perception of students with low categories of anxiety and stigma against tuberculosis sufferers means that the knowledge and lessons learned from teaching, implications, and clinical applications in nursing change the stigma that is good for people with tuberculosis. The relationship between anxiety and the stigma of nursing students to tuberculosis patients was good from the low category data, which has received training, treatment methods, and good knowledge about tuberculosis. Better stigma for the TB patients in treatment can help self-acceptance, speed up the healing and recovery process, without being burdened with mental and psychological drops. However, data from other univariate test results still showed that there were 39 respondents with high anxiety, with a range of 22%, while the average number was 46 respondents with 26%.

Anxiety descriptions consist of high and moderate, which means that there is significance to be influenced by infectious psychological responses, anxiety, worries about health, because they think that they are infected with those closest to them (Chen et al., 2020). Therefore, the level of anxiety still shows moderate and low, depending on individual or individual internal and external factors. Stigma of society that often assumes that people with tuberculosis patients must be shunned, isolated from the social community, because of feelings of fear, worry, and anxiety because it is infectious. The stigma of tuberculosis transmission has spread a lot in community life. Research data reports show that the environment and relatives to patients have a fear and concern about being infected when neighboring to patients (Oktariana, 2015). Tuberculosis transmission according to the high stigma of society influenced by factors of age, occupation, knowledge, gender, and marital status (Asmir, 2021). The category of low stigma in nursing students was in accordance with the results of education, through the teaching process in theory and clinical practice in a professional manner to help prevent, treat, and treat tuberculosis patients. Reduced stigma interventions will increase acceptance of tuberculosis patients undergoing the treatment and care process, due to lack of education, poverty, and lack of health awareness (Datiko et al., 2020).

## CONCLUSION

The description of the anxiety level of the most respondents in the low category, 94 respondents or the equivalent of 52%, and low stigma is around 174 respondents with a range of 52%. The relationship between anxiety and stigma to tuberculosis patients was significant, viz better acceptance of tuberculosis patients.

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